Intervention: Vaccines to prevent influenza in people with asthma

Finding: Insufficient evidence to determine effectiveness

Potential partners to undertake the intervention:

- ☒ Nonprofits or local coalitions
- ☒ Schools or universities
- ☒ Health care providers
- ☒ State public health departments
- ☒ Hospitals, clinics or managed care organizations
- ☐ Businesses or labor organizations
- ☐ Media
- ☒ Local public health departments
- ☐ Policymakers
- ☐ Other:

Background on the intervention:

Observational studies have shown that exacerbations of asthma in children are often associated with viral infections; however, there is disagreement between studies on the relative importance of influenza compared to other viruses in this respect. The potential impact of influenza vaccinations depends upon the frequency with which this virus causes acute exacerbations and infections in people with asthma. This may vary between epidemic and non-epidemic years.

Findings from the systematic reviews:

Vaccinations with any influenza vaccine, including live, inactivated, whole, split virus, monovalent, bivalent, trivalent, polyvalent, A and B, were reviewed. The evidence available from randomized controlled trials failed to identify a protective effect against asthma exacerbations that are related to influenza infection. Overall, influenza vaccination appears safe in patients with asthma.

Limitations/Comments:

Further large randomized controlled trials are needed to determine whether there is a protective effect of influenza vaccination in ambulatory adults and children with stable asthma. The trial should be large enough to detect infrequent exacerbations due to the immunization or influenza infection.

There was insufficient evidence to determine the effectiveness of vaccines for preventing influenza in people with asthma. Practices that lack sufficient research to support effectiveness should not be confused with ineffective programs. Rather, they should be recognized as programs that have the potential to become evidence-based practices—if properly evaluated. Practitioners are encouraged to monitor the impact of these programs in their communities and report on their findings in order to build a base of knowledge sufficient to reach consensus.

Additional information:

CDC vaccination information - www.cdc.gov/flu/professionals/vaccination/

References:

Cates CJ, Jefferson TO, Bara AI, Rowe BH. Vaccines for preventing influenza in people with asthma. *The Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: CD000364.pub2. DOI: 10.1002/14651858.CD000364.pub2.